Special Issue

New Challenges in Nuclear Energy Systems

Message from the Guest Editors

This Special Issue aims to present and disseminate the latest advances regarding the main technical pillars of nuclear power systems. Topics of interest for publication include, but are not limited to:

- Reactor design enhancements.
- Codes verification and validation: transient and accident performance including LOCA and non-LOCA, severe accident analysis, nuclear plant security, and severe natural-disaster-induced accidents.
- Recent advances in experimental thermal hydraulics analysis and testing.
- Improved code development and qualification: single-/two-phase flow heat transfer, advanced computational thermal hydraulic methods, single-/two-phase computational fluid dynamics.
- Integrated energy systems: innovative hybrid nuclear–renewable energy systems, economically competitive hybrid energy system, capable of electricity production as well as other applications.
- Material issues related to fuel, cladding, reactor pressure vessel, internal structures, aging issues, environmental effects, and fracture mechanics.
- Reactor dynamics and control.

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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